

Work Order ID 52785



Page 1

October 14, 2009 10:41:56 AM

Item ID: D412-742-043

Accept



Setup Start



Revision ID: H

Stop



Item Name: Replacement Float Skidtube

Start Date: 14/10/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 02/11/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan: *PP*

Date: *07-10-14*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	Rev H								

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

If D412-742-043 is a W/O on it's own,
Photocopy bluefile and create labels per PPP D412-742-043 CHG004

N/A *12*

Work Order ID 52785

October 14, 2009 10:41:56 AM



Page 2

Item ID: D412-742-043

Accept



Setup Start



Revision ID: H

Stop



Item Name: Replacement Float Skidtube

Start Date: 14/10/2009 Start Qty: 1.00

Cust Item ID:

Required Date: 02/11/2009 Req'd Qty: 1.00

Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

110

0.00



HandFinishing

0.00

HandFinish

Hand Finishing

Memo

*****Do not apply LPS, see QC for more info*****

1-Spray inside tube of D3391-021/-023/-025 with LPS-3 as per Dwg D3391

A/R LPS-3 11/14

2-Install tubes together and seal them all the way around using Sikaflex 241/291. Ensure tube ends line-up with saddle holes for proper alignment. using 7/16" "T" Pins.

A/R ☐ Sikaflex-241/-291 11/12345

Expiry date: 10/09

3-Install wearplates as per Dwg D3391. Ensure that plastic washers are against wearplate, then topped with the SS washer. Coat bolts with LPS "procyon". Seal all bolts with sikaflex except ones with inserts on inside of tube ,hand tighten only bolts with no sikaflex.

A/R ☐ LPS Procyon 11/104251

A/R ☐ Sikaflex-241/-291 11/12345

Expiry date: 10/09

4-Remove "T" pins once sikaflex is dry.

5-Coat all exposed hardware with LPS Procyon. Remove any excess off with MEK degreaser.

RTO

W/O: 52785		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
05.12.17	110	Acceptable to file inner saddle holes to allow assembly	PH	05.12.17	(X1)	CP 05.12.17 951042	S 05/12/17

Part No: D412-742-043 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 52785

October 14, 2009 10:41:56 AM

Page 3

Item ID: D412-742-043

Accept

Revision ID: H

Item Name: Replacement Float Skidtube

Start Date: 14/10/2009 Start Qty: 1.00

Required Date: 02/11/2009 Req'd Qty: 1.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

2) Seal 12/17

Memo

0.00

⑩

130



Packaging

Packaging

Packaging

0.00

Memo

0.00

Identify and pack for shipping as per PPP D412-742-043

Location: _____
PPP Rev: _____

50/708 12/14/12

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

29/12/22

12/07/12-22

Picklist Print

October 14, 2009 10:42:02 AM

Page 1

Work Order ID: 52785

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube



Comments:

Start Date: 14/10/2009

Required Date: 02/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3C4A		Purchased	No			110	Each	2,216.000	24.0000			
												
BOLT												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

2216

112082

14

112314

40

112720

162

112724

500

112794

1000

112829

500

X24 11 09-12-17

AN3C6A

Purchased

No

110

Each

948.0000

12.0000



BOLT

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

948

111982

948

X12 11 09-12-17

Picklist Print

October 14, 2009 10:42:02 AM

Work Order ID: 52785

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube



Comments:

Start Date: 14/10/2009

Required Date: 02/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3C7A		Purchased	No			110	Each	289.0000	8.0000			
												
BOLT												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

105906

107376

289

21

268

110

Each

4,772.000

44.0000

X 8 M 09-12-17

AN960C10L

Purchased

No



washer

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

103585

Main Warehouse

ST

112116

112612

100

100

4672

1009

3663

110

Each

0.0000

1.0000

NAS1149C0332R/M113288 X44 M 09-12-17

D3391-021RevH

Manufactured

No



Fwd Tube Assembly

B52361

X1

M 09-12-17

Picklist Print

October 14, 2009 10:42:02 AM

Work Order ID: 52785



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3391-023RevH Mid Tube Assembly		Manufactured	No			110	Each	1.0000	1.0000			

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST

1

40522

1

D3391-025RevH Manufactured No



1352796

110

Each

2.0000

1.0000

X1



09-12-17

Aft Tube Assembly

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST

2

39129

1

48122

1

Picklist Print

Page 4

October 14, 2009 10:42:02 AM

Work Order ID: 52785



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-1RevD		Manufactured	No			110	Each	29.0000	1.0000			
Wearshoe												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE		
FG	2	
33798	2	
Main Warehouse		
ST	27	
47531	1	
48163	4	
50270	1	
51676	21	

Y1 1109-12-17

Picklist Print

October 14, 2009 10:42:02 AM

Work Order ID: 52785



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-3RevD		Manufactured	No			110	Each	20.0000	1.0000			



Wearshoe

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
OFFSHORE		
FG	2	
33764	2	
Main Warehouse		
FP	11	
(50113)	11	
Main Warehouse		
ST	7	
46445	1	
46652	3	
50364	3	

x1 M 09-12-17

Picklist Print

Page 6

October 14, 2009 10:42:02 AM

Work Order ID: 52785

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube

Comments:

Start Date: 14/10/2009

Required Date: 02/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-5RevD		Manufactured	No			110	Each	30.0000	1.0000			
Wearshoe												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE	B53805	
FG	2	
34806	2	
Main Warehouse		
FP19	26	
51655	15	
51925	11	
Main Warehouse		
ST	2	
45824	1	
47433	1	

X1 M 04-12-12

Picklist Print

October 14, 2009 10:42:02 AM

Work Order ID: 52785



Parent Item: D412-742-043RevH



Parent Item Name: Replacement Float Skidtube

Start Date: 14/10/2009

Required Date: 02/11/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-1RevC		Manufactured	No			110	Each	11.0000	2.0000			

Gasket

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse	1354480	
FP	3	
51612	3	
Main Warehouse		
ST	8	
46349	1	
51218	1	
51259	3	
52313	3	

x1 34 09-12-17

Picklist Print

October 14, 2009 10:42:02 AM

Work Order ID: 52785

Parent Item: D412-742-043RevH

Parent Item Name: Replacement Float Skidtube

Comments:

Start Date: 14/10/2009

Required Date: 02/11/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-5RevC		Manufactured	No			110	Each	25.0000	1.0000			



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

B 53804

x1 2209-12-17

FP

12

51929

12

Main Warehouse

FP19

9

51669

9

Main Warehouse

ST

4

36113

1

46186

1

47318

1

51260

1

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

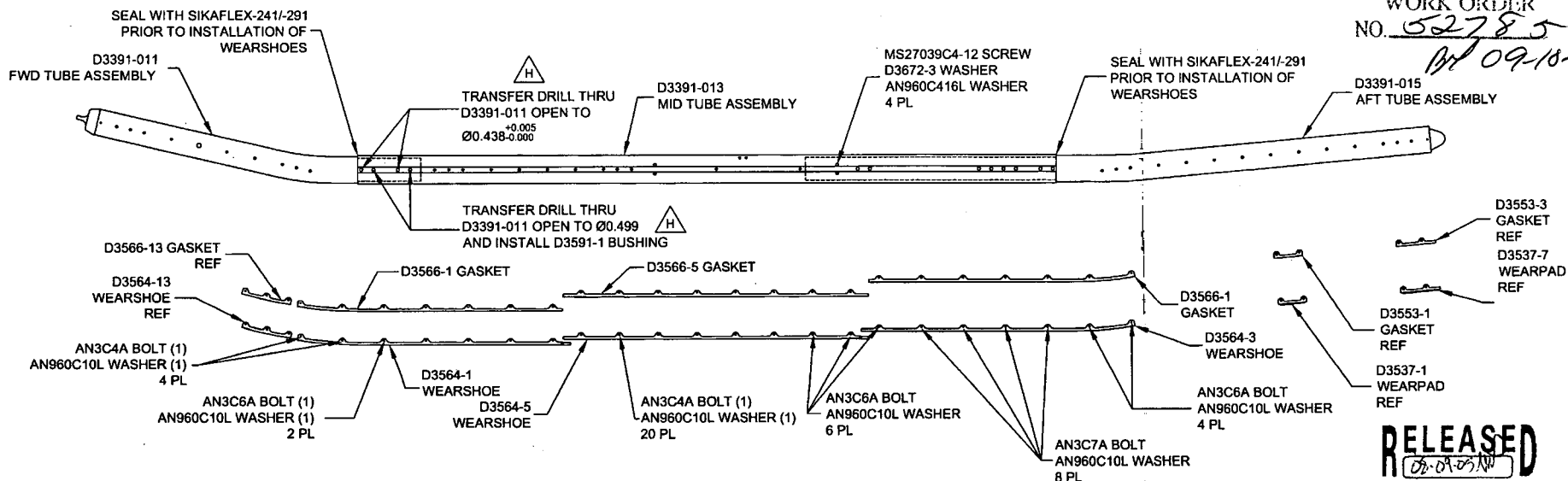
SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 52785

09-10-14

RELEASED
08-08-20

D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

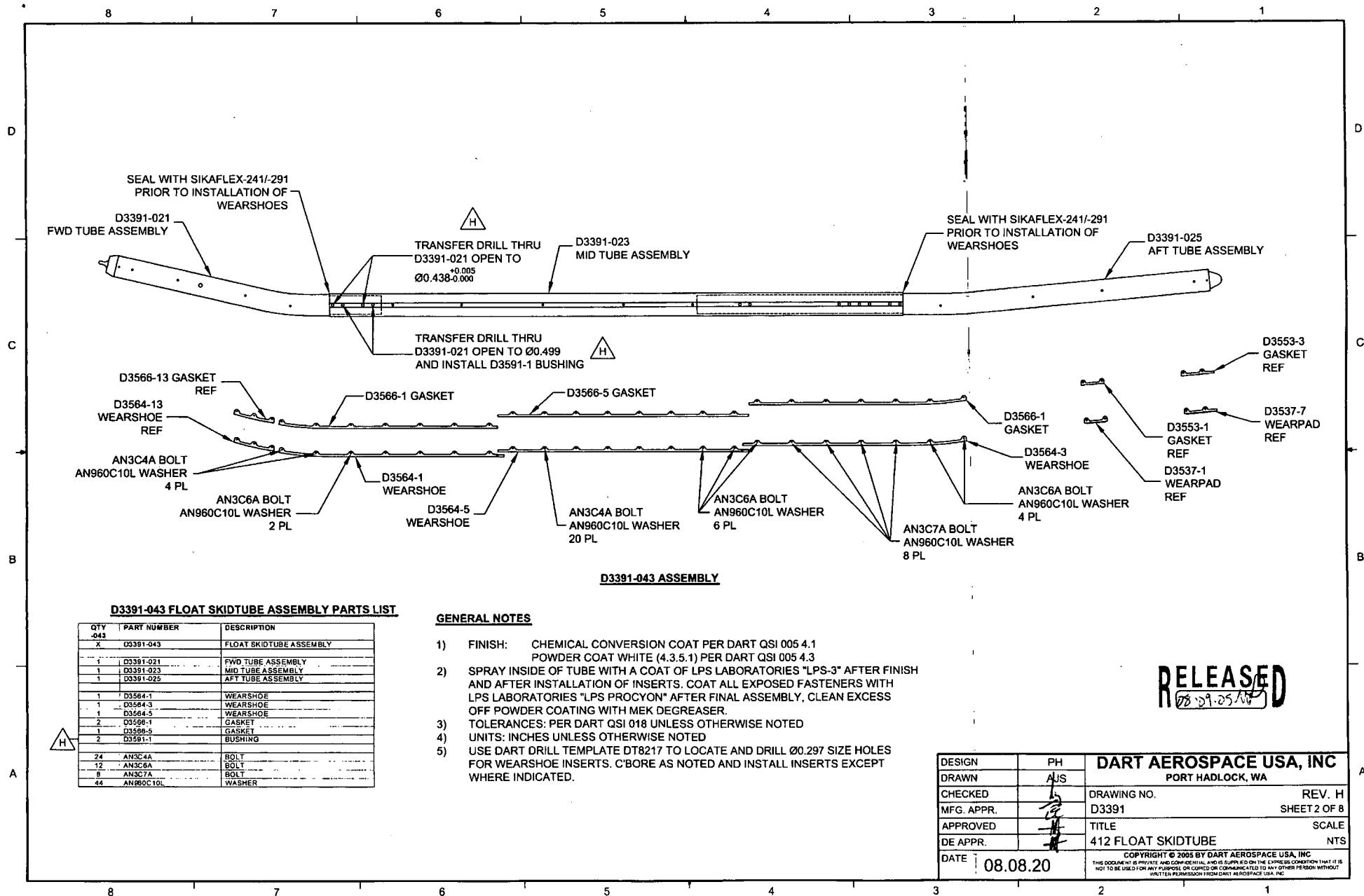
QTY	PART NUMBER	DESCRIPTION
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3591-1	BUSHING
4	D3672-3	WASHER
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

GENERAL NOTES

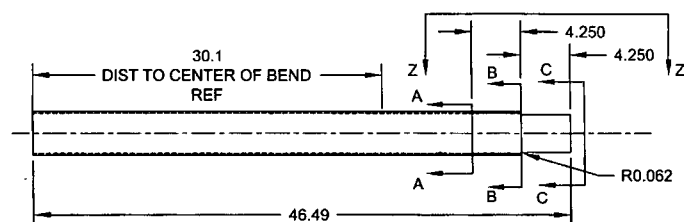
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL 0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 0.438 DIM WAS 4 PL. ADDED 0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 0.438 DIM WAS 4 PL. ADDED 0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS. DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 1 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

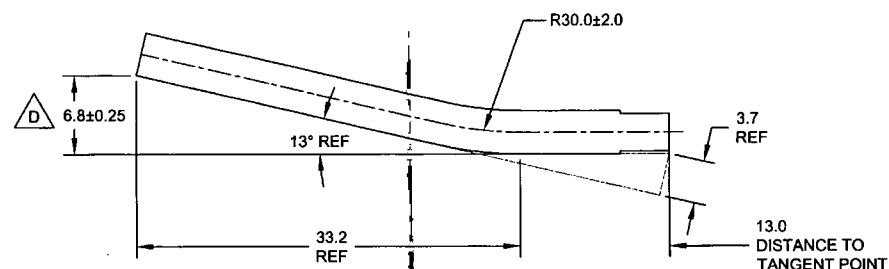
W/O 52585



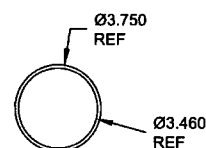
w/o 52785



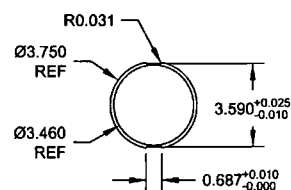
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



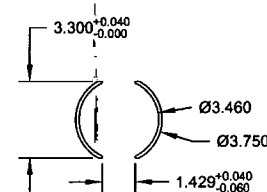
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



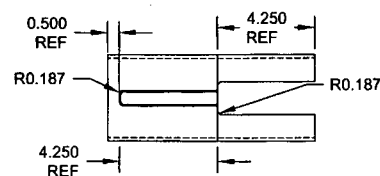
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X

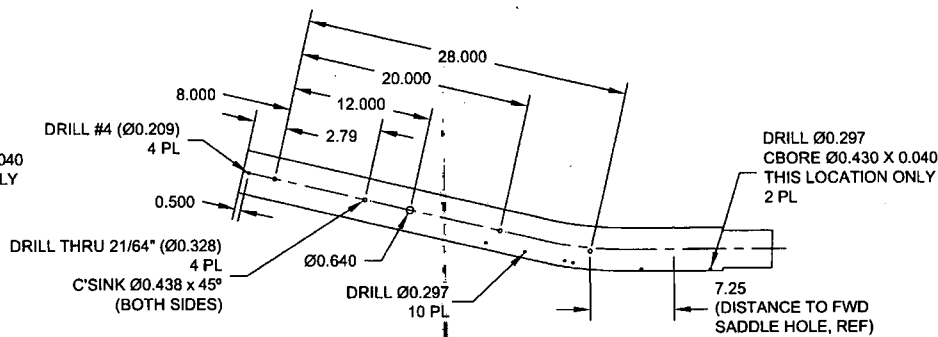


VIEW Z-Z
SCALE 2X

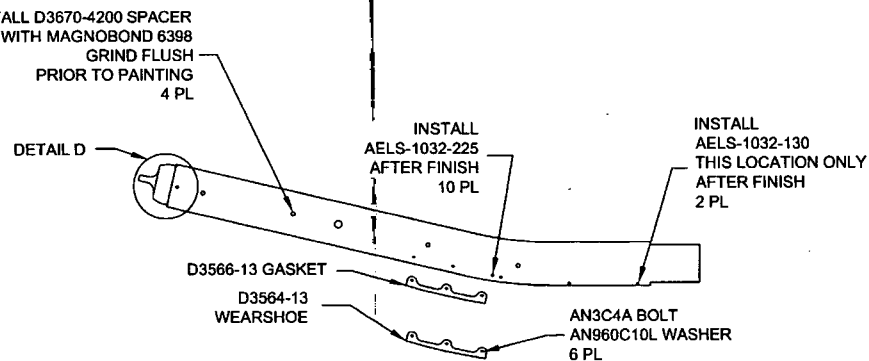
RELEASED
08-05-11

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 3 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	<small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

8	7	6	5	4	3	2
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63
64	65	66	67	68	69	70
71	72	73	74	75	76	77
78	79	80	81	82	83	84
85	86	87	88	89	90	91
92	93	94	95	96	97	98
99	100	101	102	103	104	105
106	107	108	109	110	111	112
113	114	115	116	117	118	119
120	121	122	123	124	125	126
127	128	129	130	131	132	133
134	135	136	137	138	139	140
141	142	143	144	145	146	147
148	149	150	151	152	153	154
155	156	157	158	159	160	161
162	163	164	165	166	167	168
169	170	171	172	173	174	175
176	177	178	179	180	181	182
183	184	185	186	187	188	189
190	191	192	193	194	195	196
197	198	199	200	201	202	203
204	205	206	207	208	209	210
211	212	213	214	215	216	217
218	219	220	221	222	223	224
225	226	227	228	229	230	231
232	233	234	235	236	237	238
239	240	241	242	243	244	245
246	247	248	249	250	251	252
253	254	255	256	257	258	259
260	261	262	263	264	265	266
267	268	269	270	271	272	273
274	275	276	277	278	279	280
281	282	283	284	285	286	287
288	289	290	291	292	293	294
295	296	297	298	299	300	301
302	303	304	305	306	307	308
309	310	311	312	313	314	315
316	317	318	319	320	321	322
323	324	325	326	327	328	329
330	331	332	333	334	335	336
337	338	339	340	341	342	343
344	345	346	347	348	349	350
351	352	353	354	355	356	357
358	359	360	361	362	363	364
365	366	367	368	369	370	371
372	373	374	375	376	377	378
379	380	381	382	383	384	385
386	387	388	389	390	391	392
393	394	395	396	397	398	399
400	401	402	403	404	405	406
407	408	409	410	411	412	413



D3391-021 DRILLING DETAIL



D3391-021 ASSEMBLY DETAIL

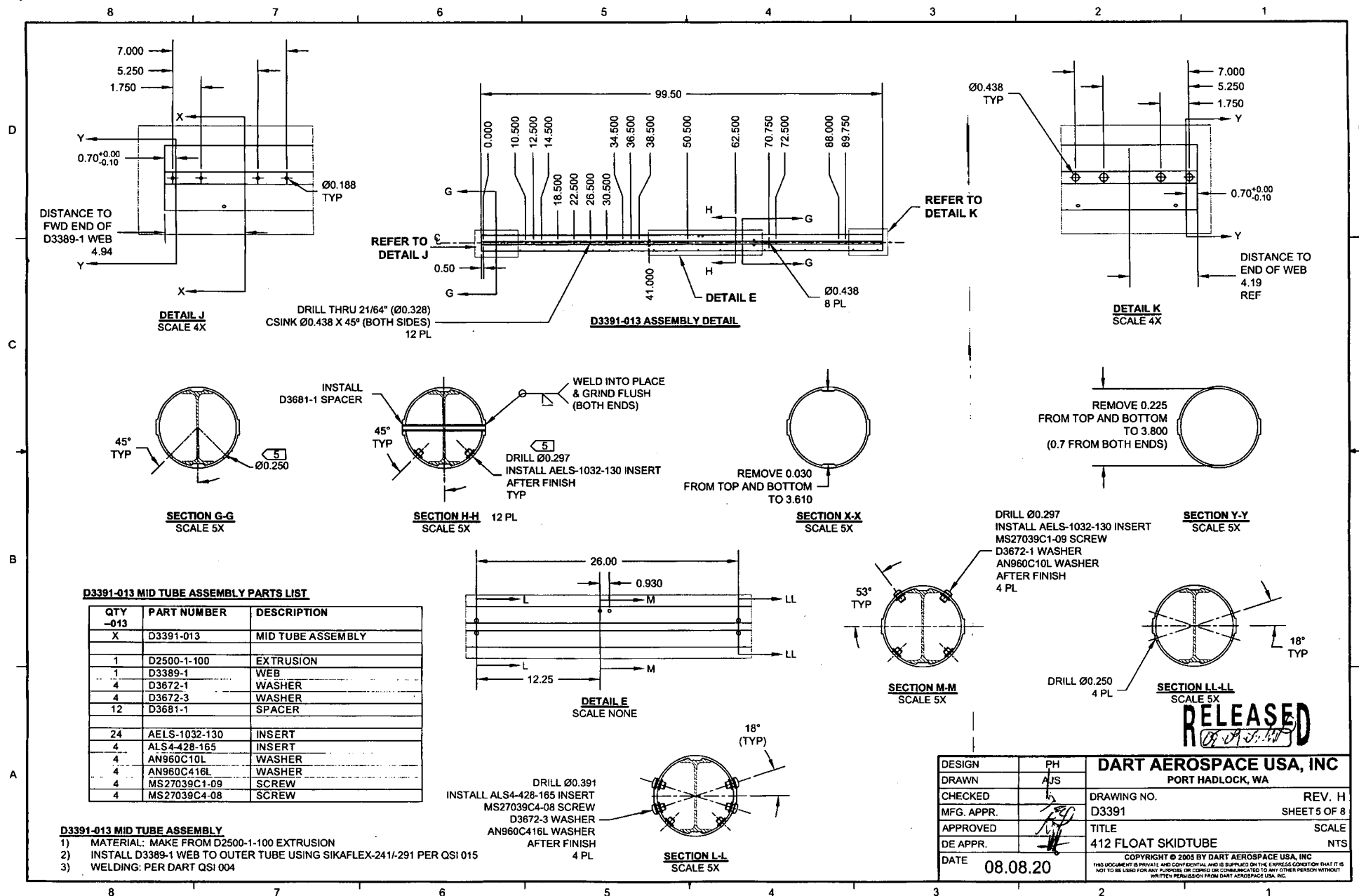
QTY - 011	QTY - 021	PART NUMBER	DESCRIPTION
X		D3391-011	FWD TUBE ASSEMBLY
	X	D3391-021	FWD TUBE ASSEMBLY
1	1	D6013-047	FWD TUBE
1	1	D3401-041	TOW CAP
1	1	D3564-13	WEARSHOE
1	1	D3566-13	GASKET
9	4	D3670-4200	SPACER
4	4	D3672-1	WASHER
10	10	AN3C4A	BOLT
10	10	AN960C10L	WASHER
2	2	AELS-1032-130	INSERT
10	10	AELS-1032-225	INSERT



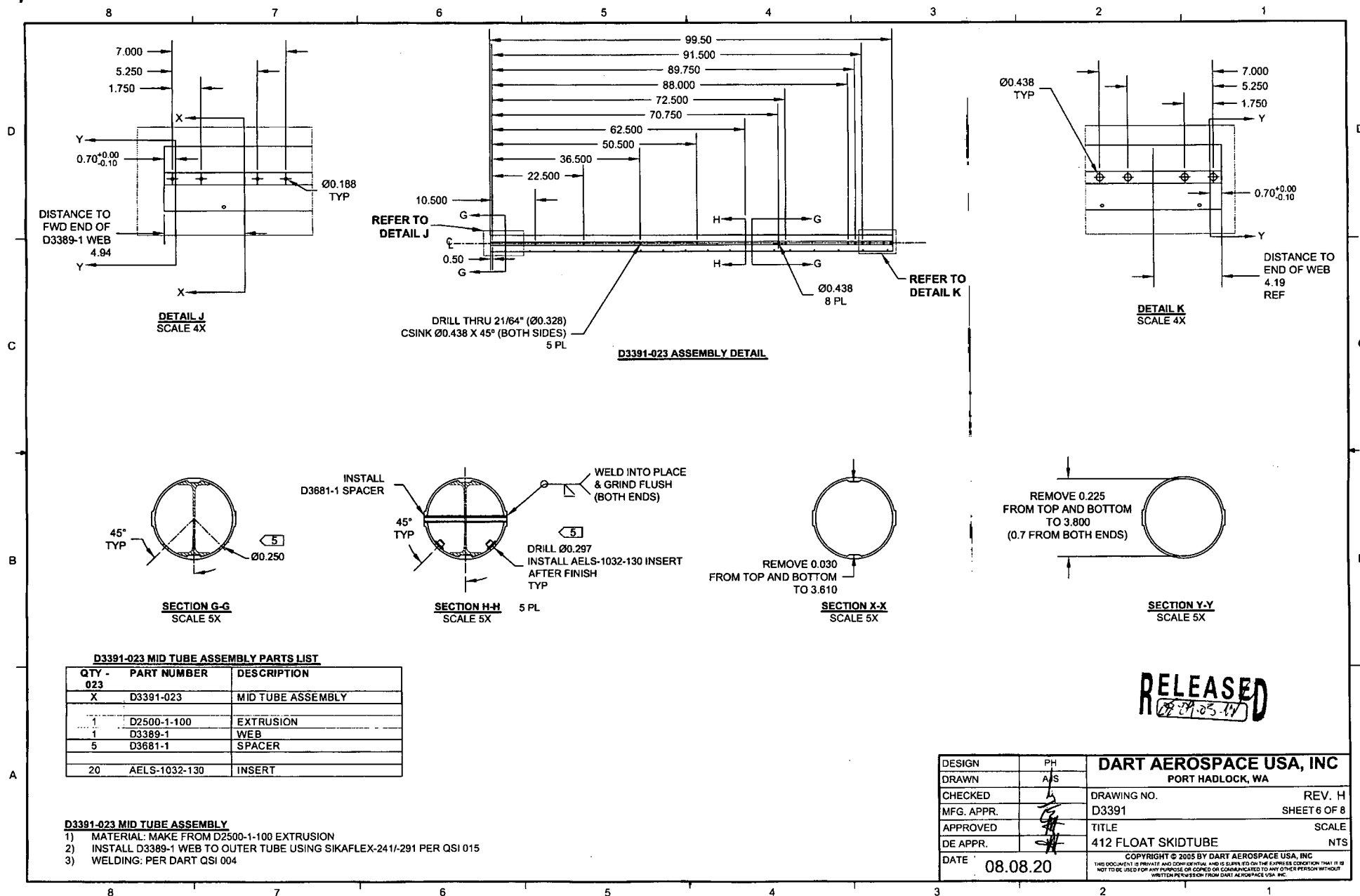
RELEASED
02-09-05

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOW, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 4 of 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND NOT BE LOANED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE USA, INC. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE USA, INC.	

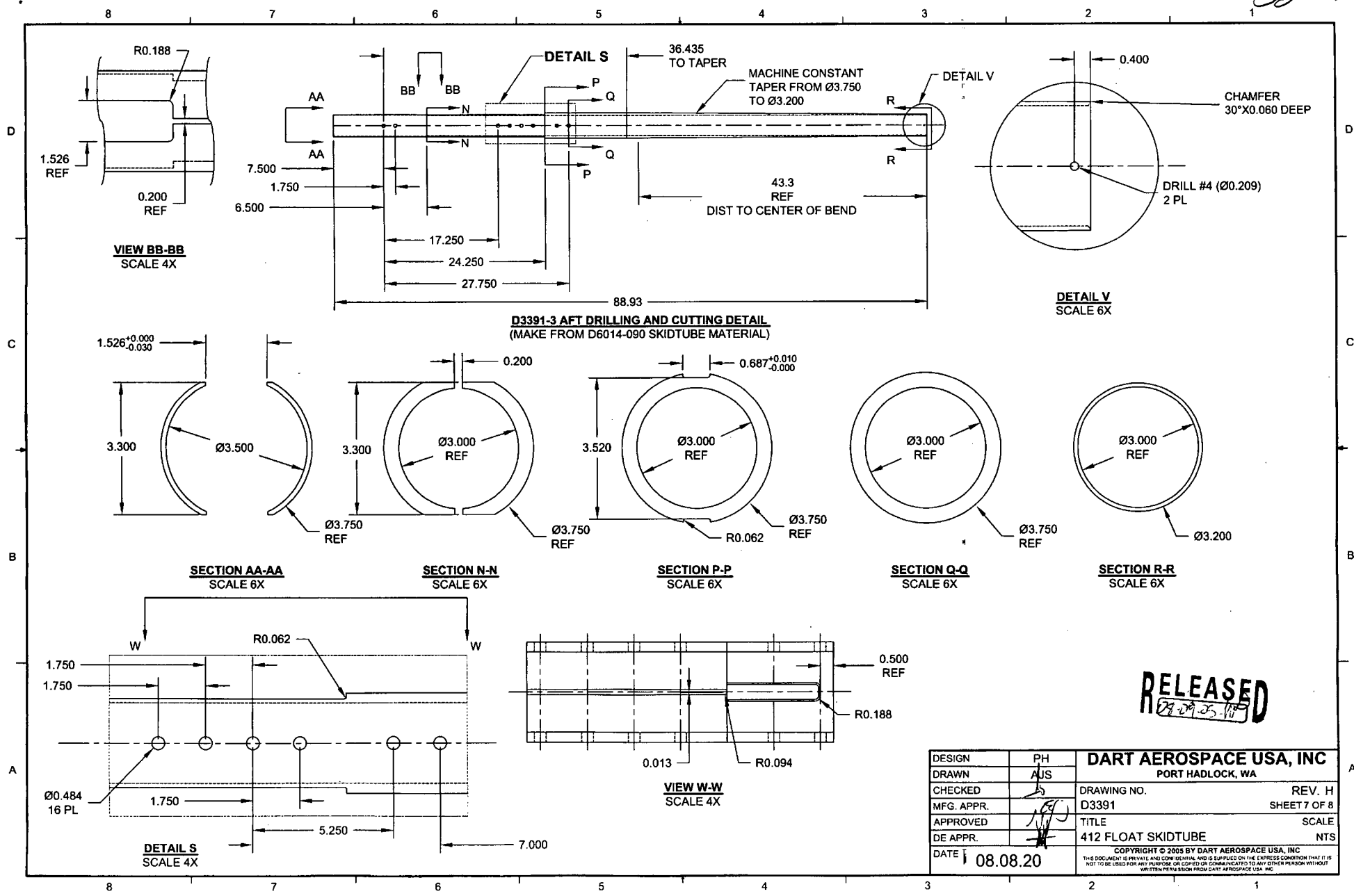
W/O 52785



w/o 52785



W/O 52785
52785



W/O 52785

